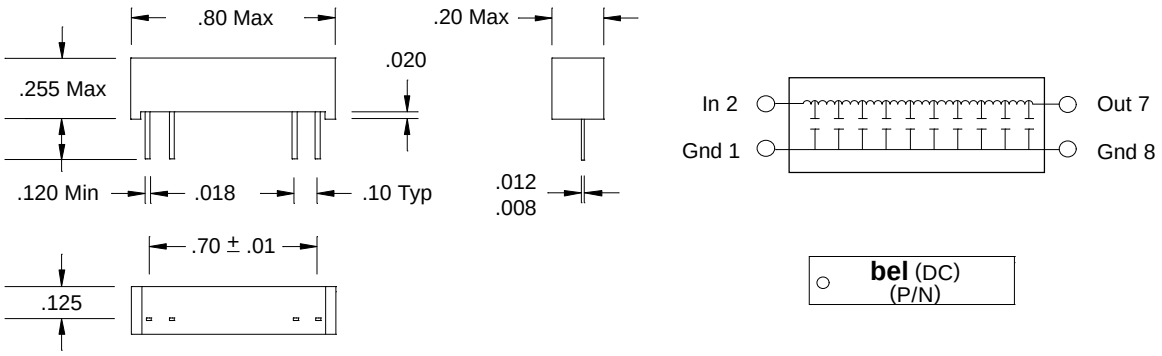
# HIGH-SPEED 4 PIN SIP PASSIVE DELAY MODULES

**Cat 16-R5**




## Part Numbers

| 100 Ohms ± 10% | 50 Ohms ±10% | 75 Ohms ± 10% | 65 Ohms ± 10% | 80 Ohms ± 10% | Total Delay | Rise Time (True) | DCR Maximum |
|---|---|---|---|---|---|---|---|
| 0401-1403-02 | A401-1500-02 | A401-1501-02 | A401-1503-02 | A401-1505-02 | 0.5 ± 0.25 ns | 1.0 ns | 1.0 Ohm |
| 0401-1403-03 | A401-1500-03 | A401-1501-03 | A401-1503-03 | A401-1505-03 | 1.0 ± 0.25 ns | 1.0 ns | 1.0 Ohm |
| 0401-1403-05 | A401-1500-05 | A401-1501-05 | A401-1503-05 | A401-1505-05 | 2.0 ± 0.25 ns | 1.0 ns | 1.0 Ohm |
| 0401-1403-07 | A401-1500-07 | A401-1501-07 | A401-1503-07 | A401-1505-07 | 3.0 ± 0.25 ns | 1.0 ns | 1.0 Ohm |
| 0401-1403-09 | A401-1500-09 | A401-1501-09 | A401-1503-09 | A401-1505-09 | 4.0 ± 0.25 ns | 1.0 ns | 1.0 Ohm |
| 0401-1403-11 | A401-1500-11 | A401-1501-11 | A401-1503-11 | A401-1505-11 | 5.0 ± 0.25 ns | 1.1 ns | 1.0 Ohm |
| 0401-1403-13 | A401-1500-13 | A401-1501-13 | A401-1503-13 | A401-1505-13 | 6.0 ± 0.25 ns | 1.3 ns | 1.0 Ohm |
| 0401-1403-15 | A401-1500-15 | A401-1501-15 | A401-1503-15 | A401-1505-15 | 7.0 ± .025 ns | 1.5 ns | 1.0 Ohm |
| 0401-1403-17 | A401-1500-17 | A401-1501-17 | A401-1503-17 | A401-1505-17 | 8.0 ± 0.25 ns | 1.7 ns | 1.0 Ohm |
| 0401-1403-19 | A401-1500-19 | A401-1501-19 | A401-1503-19 | A401-1505-19 | 9.0 ± 0.25 ns | 1.9 ns | 1.0 Ohm |
| 0401-1403-21 | A401-1500-21 | A401-1501-21 | A401-1503-21 | A401-1505-21 | 10.0 ± 0.25 ns | 2.0 ns | 1.0 Ohm |
| 0401-1403-23 | A401-1500-23 | A401-1501-23 | A401-1503-23 | A401-1505-23 | 11.0 ± 0.25 ns | 2.2 ns | 2.0 Ohms |
| 0401-1403-25 | A401-1500-25 | A401-1501-25 | A401-1503-25 | A401-1505-25 | 12.0 ± 0.25 ns | 2.3 ns | 2.0 Ohms |
| 0401-1403-27 | A401-1500-27 | A401-1501-27 | A401-1503-27 | A401-1505-27 | 13.0 ± 0.25 ns | 2.5 ns | 2.0 Ohms |
| 0401-1403-29 | A401-1500-29 | A401-1501-29 | A401-1503-29 | A401-1505-29 | 14.0 ± 0.25 ns | 2.6 ns | 2.0 Ohms |
| 0401-1403-31 | A401-1500-31 | A401-1501-31 | A401-1503-31 | A401-1505-31 | 15.0 ± 0.25 ns | 2.8 ns | 2.0 Ohms |
| 0401-1403-33 | A401-1500-33 | A401-1501-33 | A401-1503-33 | A401-1505-33 | 16.0 ± 0.25 ns | 3.0 ns | 2.5 Ohms |
| 0401-1403-35 | A401-1500-35 | A401-1501-35 | A401-1503-35 | A401-1505-35 | 17.0 ± 0.25 ns | 3.2 ns | 2.5 Ohms |
| 0401-1403-37 | A401-1500-37 | A401-1501-37 | A401-1503-37 | A401-1505-37 | 18.0 ± 0.25 ns | 3.4 ns | 2.5 Ohms |
| 0401-1403-39 | A401-1500-39 | A401-1501-39 | A401-1503-39 | A401-1505-39 | 19.0 ± 0.25 ns | 3.6 ns | 2.5 Ohms |
| 0401-1403-40 | A401-1500-40 | A401-1501-40 | A401-1503-40 | A401-1505-40 | 20.0 ± 0.50 ns | 3.8 ns | 2.5 Ohms |
| 0401-1403-46 | A401-1500-46 | A401-1501-46 | A401-1503-46 | A401-1505-46 | 25.0 ± 0.50 ns | 4.5 ns | 4.0 Ohms |
| 0401-1403-51 | A401-1500-51 | A401-1501-51 | A401-1503-51 | A401-1505-51 | 30.0 ± 0.50 ns | 5.5 ns | 4.5 Ohms |
| 0401-1403-56 | A401-1500-56 | A401-1501-56 | A401-1503-56 | A401-1505-56 | 35.0 ± 0.50 ns | 6.4 ns | 5.5 Ohms |
| 0401-1403-61 | A401-1500-61 | A401-1501-61 | A401-1503-61 | A401-1505-61 | 40.0 ± 0.50 ns | 7.4 ns | 6.0 Ohms |

## Electrical Characteristics

| | |
|---|---|
| Delay Measurement | 50% Levels |
| Rise Time Measurement | 10%-90% Levels |
| Distortion | ± 10% |
| Insulation Resistance @ 50 Vdc | 10K Megohms Min. |
| Dielectric Withstanding Voltage | 50 Vdc |
| Operating Temperature Range | -55ºC to +125ºC |
| Temperature Coefficient of Delay | 100 PPM/ºC Max. |
| Minimum Input Pulse Width | 3 x Trout or 5 ns W.I.G. |
| Maximum Duty Cycle | 60% |

**Other Delays and Impedances Available**
**Contact Sales**

## Test Conditions @ 25ºC

| | | |
|---|---|---|
| Ein | Pulse Voltage | 1 Volt Typical |
| Trin | Rise Time | 2.0 ns (10%-90%) |
| PW | Pulse Width | 3 x Total Delay |
| PP | Pulse Period | 4 x Pulse Width |

## Notes

Transfer molded for better reliability
Compatible with ECL & TTL circuits
Terminals: Electro-Tin plate phosphor bronze
Performance warranty is limited to specified parameters listed

*Specifications subject to change without notice.*

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